Submittal of Annual Reports and other Compliance Documents for Municipal Separate Storm Sewer System (MS4) Permits

NOTE: Missing or incomplete fields are highlighted at the bottom of each page. You may save, close and return to your draft permit as often as necessary to complete your application. After 120 days your draft is **deleted.**

Reporting Information

Submittal Type: Annual Report

Project Name: City of Menomonie 2017 Report

County: Dunn

Municipality: Menomonie, City

Facility Number: 31426 Reporting Year: 2017

Required Attachments and Supplemental Information

Please complete the contents of each tab to submit your MS4 permit compliance document. The information included in this checklist is necessary for a complete submittal. A complete and detailed submittal will help us review about your MS4 permit document. To help us make a decision in the shortest amount of time possible, the following information must be submitted:

Annual Report

- Review related web site and instructions for Municipal storm water permit eReporting [Exit Form]
- Attach the following items as appropriate using the attachments tab above
 - Construction Site Pollution Control Annual Report Summary
 - o Illicit Discharge Detection and Elimination Annual Report Summary
 - Leaf and Yard Waste Management
 - Municipal Cooperation Attachment
 - o Municipal Facility Inspections
 - o Pollution Prevention Annual Report Summary
 - o Post-Construction Storm Water Management Annual Report Summary
 - o Public Education and Outreach Annual Report Summary
 - o Public Involvement and Participation Annual Report Summary
 - Storm Water Consortium/Group Report
 - o Storm Sewer Map Annual Report Attachment
 - o Storm Water Quality Management Annual Report Attachment
 - o TMDL Attachment
 - o Winter Road Maintenance
 - Other Annual Report Attachment
- Complete all required forms and upload required attachments
- Sign and Submit form

Form 3400-224 (09/17)

Municipal Contact Information- Complete

Notice: Pursuant to s. NR 216.07(8), Wis. Adm. Code, an owner or operator of a Municipal Separate Storm Sewer System (MS4) is required to submit an annual report to the Department of Natural Resources (Department) by March 31 of each year to report on activities for the previous calendar year ("reporting year"). This form is being provided by the Department for the user's convenience for reporting on activities undertaken in each reporting year of the permit term. Personal information collected will be used for administrative purposes and may be provided to the extent required by Wisconsin's Open Records Law [ss. 19.31-19.39, Wis. Stats.].

Note: Compliance items must be submitted using the Attachments tab.

Municipality Information	
Name of Municipality	Menomonie, City
Facility ID # or (FIN):	31426
Updated Information:	Check to update mailing address information
Mailing Address:	800 Wilson Avenue
Mailing Address 2:	
City:	Menomonie
State:	Wisconsin
Zip Code:	54751 xxxxx or xxxxx-xxxx
Yes ○ No ○ UnsureHas there been any changes to the munic the municipality has added or dropped co○ Yes ○ No ○ Unsure	ipality's participation in group efforts towards permit compliances (i.e., nsortium membership)?
Primary Municipal Contact Person	(Authorized Representative for MS4 Permit)
	✓ Select to <i>create new</i> primary contact
First Name:	Randy
Last Name:	Eide
	✓ Select to <i>update</i> current contact information
Title:	DPW
Mailing Address:	800 Wilson Avenue
Mailing Address 2:	
City:	Menomonie
State:	<u>WI</u>
Zip Code:	54751 xxxxx or xxxxx-xxxx
Phone Number:	715-232-2207 Ext: xxx-xxx-xxxx

Additional Contacts Information (O	ptional)		
	☐ I&E Program		
	☑ IDDE Program		
	☑ IDDE Response Procedure Manual		
Individual with responsibility for: (Check all that apply)			
(Crieck an that apply)			
	✓ Winter roadway maintenance		
First Name:	Bruce		
Last Name:	Heath		
Title:	Street Supervisor		
Mailing Address:	621 11th Ave		
Mailing Address 2:			
City:	Menomonie		
State:	. <u>WI</u>		
Zip Code:	54751 xxxxx or xxxxx-xxxx		
Phone Number:	715-232-2302 Ext: xxx-xxx		
Email:	bheath@menomonie-wi.gov		
Individual with responsibility for: (Check all that apply)	 □ I&E Program □ IDDE Program □ IDDE Response Procedure Manual ☑ Municipal-wide Water Quality Plan □ Ordinances □ Pollution Prevention Program ☑ Post-Construction Program □ Winter roadway maintenance 		
First Name:	Robert		
Last Name:	Jones		
Title:	Design Engineer		
Mailing Address:	604 Wilson Ave		
Mailing Address 2:			
City:	Menomonie		
State:	<u>WI</u>		
Zip Code:	54751 xxxxx or xxxxx-xxxx		
Phone Number:	715-235-9081 Ext: xxx-xxx-xxxx		
Email:	rob.jones@cedarcorp.com		



Minimum Control Measures- Section 1: Complete

1. Public Education and Outreach

a. Complete the following information on Public Education and Outreach Activities related to storm water. Select the Mechanism that best describes how the topic message was conveyed to your population. Use the **Add Activity** to add multiple Mechanisms. For Quantity, choose the range for the number of Mechanisms chosen (i.e., number of workshops, events). Quantity and Estimated People reached are both optional.

number of Mechanisms chosen (i.e reached are both optional.	e., number of v	vorkshops, events). (Quantity and Estimated People
Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
Topic: Detection and elimination of	f illicit dischar	ges	
Informational booth at event	<u>1 - 9</u>	350	Yes ○ No
Educational activities (School presentations, summer camps, etc)	<u>1-9</u>	15	○ Yes ● No
Topic: Management of materials t household hazardous waste and h			on from automobiles, pet wast
Informational booth at event	<u>1 - 9</u>	350	
Educational activities (School presentations, summer camps, etc)	<u>1 - 9</u>	15	○ Yes ⑤ No
Educational activities (School presentations, summer camps, etc)	Select	400	
Topic : Beneficial onsite reuse of leand pesticides	aves and grass	clippings/proper us	e of lawn and garden fertilizer
Informational booth at event	<u>1 - 9</u>	350	
Educational activities (School presentations, summer camps, etc)	1-9	15	○ Yes ○ No
<u>Workshops</u>	<u>1 - 9</u>	75	○ Yes ○ No
Topic : Management of stream bar restore and enhance the ecological			owners to minimize erosion an
<u>Workshops</u>	<u>1 - 9</u>	75	Yes ○ No
Topic : Infiltration of residential stosidewalks	orm water run	off from rooftop dov	vnspouts, driveways and
Informational booth at event	1-9	350	
Educational activities (School presentations, summer camps, etc)	<u>1 - 9</u>	15	○ Yes No

Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)	
Topic : Inform and where appropriate emaintenance of construction site erosi how to design, install and maintain the	on control			
Educational activities (School presentations, summer camps, etc)	1-9	12		
Topic : Identify businesses and activitie where appropriate, educate specific as				
Did not focus on this topic this reporting year	Select		○ Yes ○ No	
Topic : Promote environmentally sensi including green infrastructure and low			by developers and	designers,
Government event (public hearing, council meeting, etc.)	1-9	14	○ Yes ○ No	
Topic: Other (describe):				
Select	Select		○ Yes ○ No	
b. Any other Public Education and Out may be added here or attached on the			inclusion in the A	nnual Report
Education and Outreach Activities are education group Rain to Rivers of Woutlining all of the education and out in. Rain to Rivers also supports education advertising, public service announcemother educational opportunities. The to Rivers since the organization was for	estern Wisteach activition and one ments, hand City of Me	sconsin. Attached is ities the group has p utreach through: mi douts, Facebook, we	a spreadsheet articipated ni grants, b sites and many	
Missing Information				
	Do	o not close your work unt	il you SAVE.	
				rm 3400-224 (09/17)
Minimum Control Measures - Sectio		plete		
2. Public Involvement and Participat				CC
a. Describe how the municipality has l	cept the fo	llowing local officials	and municipal sta	itt apprised of

the municipal storm water discharge permit programs and its requirements.

Elected Officials

Elected officials are apprised of our municipal storm water discharge permit programs and requirements through council meetings and their review and approval of the annual report.

Municipal Officials

Municipal officials are kept appraised or our permit programs through weekly staff meetings and their active participation in the development of the annual report.

Appropriate Staff

City staff work various parts of our storm water program. In 2017 we completed an internal review of the roles and responsibilities of different departments associated with the storm water permit. After several review meetings a new roles and responsibilities document was approved. See attached document.

b. Complete the following information on Public Involvement Activities related to storm water. Select the mechanism that best describes how the topic message was conveyed to your population. Use the Add Activity to add multiple mechanisms. For Quantity, choose the range for number Mechanisms chosen (i.e., number of workshops, events). Quantity and Estimated People reached are both optional.

Mechanism	Quantity (optional)	Est. People Reached (optional)	Regional Effort? (optional)
Topic: Storm Water Management Plan	n and/or up	odates	
<u>Presentation of Storm Water Information</u>		25	○ Yes No
Topic : Storm water related ordinance	and/or up	dates	
<u>None</u>	Select		○ Yes ○ No
Topic: MS4 Annual Report			
Government Event (Public Hearing, Council Meeting, etc)	<u>1 - 9</u>	18	○ Yes • No
<u>Presentation of Storm Water Information</u>	<u>1 - 9</u>	90	● Yes ○ No
Topic : Volunteer Opportunities			
Stream monitoring	<u>20 - 49</u>	59	○ Yes ⑤ No
Planting community rain garden	<u>1 - 9</u>	50	○ Yes No
Topic : Other (describe): UW Stout L	AKES REU r	esearch and activitie	es Outbrief
Public Workshop	<u>1 - 9</u>	95	
Government Event (Public Hearing, Council Meeting, etc)	1 - 9	16	○ Yes ○ No

c. Any other Public Involvement and Participation program information for inclusion in the Annual Report may be added here or attached on the attachments page Member of the Red Cedar Watershed TMDL Implementation Plan. Supporter of UW Stout Lakes REU research in the Red Cedar Watershed. Annual 2017 Dunn county Water Quality Specialist Report to the City Council. **Missing Information** Do not close your work until you SAVE. Form 3400-224 (09/17) Minimum Control Measures - Section 3: Complete 3. Illicit Discharge Detection and Elimination ☐ Unsure a. How many total outfalls does the municipality have? 195 ☐ Unsure b. How many outfalls did the municipality evaluate as part 195 of their routine ongoing field screening program? c. How many were confirmed illicit discharges? Unsure 0 Unsure d. How many illicit discharge complaints did the 0 municipality receive? □Unsure e. How many were confirmed illicit discharges? 0 Unsure f. How many of the identified Illicit discharges did the 0 municipality eliminate in the reporting year? g. How many of the following enforcement mechanisms did the municipality $\ \square$ Unsure use to enforce its illicit discharge ordinance? ✓ Verbal Warning ☐ Written Warning (including email) ☐ Notice of Violation ☐ Civil Penalty/ Citation h. Any other Illicit Discharge Detection and Elimination program information for inclusion in the Annual Report may be added here or attached on the attachments page. **Missing Information**

Do not close your work until you SAVE.

Minimum Control Measures - Section 4: C	omplete		
4. Construction Site Pollutant Control			
a. How many total construction sites were a in the reporting year?	ctive at any point	65	□ Unsure
b. How many construction sites did the mun permits for in the reporting year?	icipality issue	54	☐ Unsure
c. Do the above numbers include sites <1 ac	re?	●Yes ○No ○	Unsure
d. How many erosion control inspections did complete in the reporting year?	the municipality	150	□Unsure
 e. What types of enforcement actions does to compel compliance with the regulatory apply and enter the number of each used ☑ Verbal Warning ☑ Written Warning (including email) 	mechanism? Che	ck all that	□ Unsure
✓ Notice of Violation	5		
☑ Civil Penalty/ Citation	1		
☐ Stop Work Order			
☐ Forfeiture of Deposit			
☐ No Authority			
☐ Other - Describe below			
f. Any other Construction Site Pollutant Con the Annual Report may be added here or			
Missing Information			
	Do not close your v	vork until you SAVI	E.
		,	Form 3400-224 (09/
Minimum Control Measures - Section 5: C	omplete		
5. Post-Construction Storm Water Manager			
a. How many new construction sites with new water management practices have receivedb. How many privately owned storm water f	ed local approvals	?	☐ Unsure
were completed in the reporting year?			
c. What types of enforcement actions does to compel compliance with the regulatory			☐ Unsure

F. F Z.		
✓ Verbal Warning	0	•
✓ Written Warning (including email)	4	
✓ Notice of Violation	0	
☑ Civil Penalty/ Citation	0	
☐ Forfeiture of Deposit		
☐ Complete maintenance		
☐ Bill responsible part		
☐ No Authority		
☐ Other - Describe below		
page.		
Missing Information		
Missing Information	Do not close your work t	until you SAVE.
		until you SAVE. Form 3400-224 (09/17
Minimum Control Measures - Section 6 :		
Minimum Control Measures - Section 6: 6. Pollution Prevention	Complete	Form 3400-224 (09/17
Minimum Control Measures - Section 6 : 6. Pollution Prevention Storm Water Management Facility Inspect	Complete tions (ponds, biofilters, c	Form 3400-224 (09/17 etc.) □ Not Applicable
Minimum Control Measures - Section 6: 6. Pollution Prevention	Complete tions (ponds, biofilters, c	Form 3400-224 (09/17
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or	Complete tions (ponds, biofilters, o	Form 3400-224 (09/17 etc.) □ Not Applicable
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or structural storm water facilities? b. How many new municipally owned store	Complete tions (ponds, biofilters, owned or operated m water facilities were	etc.)
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or structural storm water facilities? b. How many new municipally owned store installed in the reporting year? c. How many municipally owned storm was	complete tions (ponds, biofilters, of which were devices were inspectations)	etc.)
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or structural storm water facilities? b. How many new municipally owned storn installed in the reporting year? c. How many municipally owned storm was in the reporting year? d. How many of these facilities required many many of these facilities required many municipally owned storm was in the reporting year?	complete tions (ponds, biofilters, of which were devices were inspectations) attenuable.	etc.)
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or structural storm water facilities? b. How many new municipally owned storn installed in the reporting year? c. How many municipally owned storm was in the reporting year? d. How many of these facilities required mulf so, attach report on attachments page	complete tions (ponds, biofilters, of which were devices were inspectations) aintenance?	Form 3400-224 (09/17 etc.)
Minimum Control Measures - Section 6: 6. Pollution Prevention Storm Water Management Facility Inspect a. Enter the total number of municipally or structural storm water facilities? b. How many new municipally owned storm installed in the reporting year? c. How many municipally owned storm was in the reporting year? d. How many of these facilities required mulf so, attach report on attachments page Public Works Yards & Other Municipally Ote. How many inspections of municipal pro-	complete tions (ponds, biofilters, owned or operated m water facilities were ater devices were inspectations aintenance? e. owned Properties (SWPF) perties been conducted	Form 3400-224 (09/17 etc.)

1	ollection Services - <i>Street Sweeping / Cleaning Program</i> Dod Did the municipality conduct street sweeping/cleaning during			
0		○ No ○ Unsure		
h.	If known, how many tons of material was removed?	1453 🗆 Unsure		
i.	If street cleaning is identified as a storm water best management practice in the pollutant loading analysis, was street cleaning completed at the assumed frequency? • Yes			
	O No - Explain			
	○ Not Applicable○ Unsure	•		
C	ollection Services - Catch Basin Sump Cleaning Program 🗆 No	ot Applicable		
j.	Did the municipality conduct catch basin sump cleaning duri • Yes	ng the reporting year? ○ No ○ Unsure		
k.	How many catch basin sumps were cleaned in the reporting	year? 55 🗆 Unsure		
١.	If known, how many tons of material was removed?	✓ Unsure		
m.	If catch basin sump cleaning is identified as a storm water be practice in the pollutant loading analysis, was cleaning compfrequency? • Yes • No - Explain			
	○ Not Applicable ○ Unsure			
C	ollection Services - <i>Leaf Collection Program</i> 🔲 Not Applicable			
n.	Does the municipality conduct curbside leaf collection?	● Yes ○ No ○ Unsure		
o.	Does the municipality notify homeowners about pickup?	● Yes ○ No ○Unsure		
	Where are the residents directed to store the leaves for collection?			
	☐ Pile on terrace ☐ Pile in street ☑ Bags on terrace ☐ Uns ☑ Other - Describe	sure		
	bags must be compostable			
p.	What is the frequency of collection?			
q.	3 to 4 consecutive Mondays in Oct/Nov Is collection followed by street sweeping/cleaning?	Yes ○ No ○		
		Unsure		
-	/inter Road Management □ Not Applicable ote: We are requesting information that goes beyond the reporting y	ear, answer the best you can.		

r. How many lane-miles of roadway is the municipality are ponsible for doing snow and ice control?	
s. Provide amount of de-icing products used by month last winter season?	
Solids (tons) (ex. sand, or salt-sand)	
Oct 0 Nov 31 Dec 411 Jan 492 Feb 319 March* 67	
Liquids (gallons) (ex. brine)	
Oct 0 Nov 2145 Dec 8350 Jan 6120 Feb 5600 March* 2900	
t Was salt applying machinery calibrated in the reporting year? ● Yes ○ No ○	
Unsure	
u. Have municipal personnel attended salt reduction strategy training in the reporting year? Unsure	
training in the reporting year:	
If yes, describe what training was provided: Salt minimization training	
When: October 2016 How many attended: 10	
Laboratoria de la constante de	
Internal (Staff) Education & Communication	
v. Have training or education on SWPPPs for municipal facilities • Yes • No • Unsure • Unsure	
If yes, describe what training was provided	
Informational meeting	
When: Nov and Dec 2017 How many attended: 8	
Additional Pollution Prevention Information	
w. Any other Pollution Prevention program information for inclusion in the Annual Report may be	
added here or attached on the attachments page.	
Storm Water Utility financially supported water monitoring of Jarrett Creek to determine chloride	
levels in the creek.	
Permeable Pavers and Rain Garden installed at Wilson Park.	
Missing Information	
Do not close your work until you SAVE.	
Form 3400-224 (09)/17)
Minimum Control Measures - Section 7: Complete	
7. Storm Sewer System Map	
a. Did the municipality update their storm sewer map this year? Yes No Unsure	
If yes, check the areas the map items that got updated or changed: ☑ Storm water treatment facilities	
Storm water treatment facilities ☐ Storm pipes	
✓ Vegetated swales	

	☐ Outfalls ☐ Other - Describe below
	A Company of the Annual Deport
b.	Any other Storm Sewer System Map information for inclusion in the Annual Report may be added here or attached on the attachments page.
1	

Do not close your work until you SAVE.

Storm water utility

Form 3400-224 (09/17)

Final Evaluation - Complete

Fiscal Analysis

Complete the fiscal analysis table provided below. For municipalities that do not break out funding into permit program elements, please enter the monetary amount to your best estimate of what funding may be going towards these programs.

Annual Expenditure Reporting Year	Budget Reporting Year	Budget Upcoming Year	Source of Funds
lement: Public	Education and Out	reach	
22500	27571	29464	Storm water utility
lement: Public	Involvement and P	articipation	
21500	26346	28154	Storm water utility
24500	ischarge Detection 30022 uction Site Polluta	32083	n Storm water utility
10000	12254	13095	Storm water utility
ement: Post-C	Construction Storm	Water Manage	ment
23000	28184	30119	Storm water utility
lement: Polluti	on Prevention		
87500	107222	114582	Storm water utility
lement: Storm	Water Quality Mai	nagement	
iement. Storm			

Other (describe)

10000

Overhead and debt payments

13095

12254

Water Quality
a: Were there any known water quality improvements or degradation in the receiving waters to which the municipality's storm sewer system directly discharges to? ○Yes ●No ○Unsure If Yes, explain below:
b: Have any of the receiving waters that the municipality discharges to been added to the impaired waters list during the reporting year? ○Yes ●No ○Unsure
c: Has the municipality evaluated their storm water practices to reduce the pollutants of concern? ● Yes ○ No ○ Unsure
Additional Information
Based on the municipality's storm water program evaluation in Part II, describe any proposed changes to the municipality's storm water program.

Storm water utility

		STATE OF THE PARTY
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Missing	HILLOILI	auvii

Do not close your work until you SAVE.

Form 3400-224 (09/17)

Requests for Assistance on Improving Permit Programs

Would municipality like the Department to contact them about providing more information on developing or improving any of the Municipal Separate Storm Sewer Permit programs?

Please select all that apply:
☐ Public Education and Outreach
☐ Public Involvement
□ Illicit Discharge Detection and Elimination
☐ Post-Construction Storm Water Management
☐ Storm Water Quality Management
☐ Storm Sewer System Map
☐ Construction Site Pollutant Control
☐ Pollution Prevention
☐ Water Quality Concerns
☐ Compliance Schedule Items Due
☐ MS4 Program Evaluation

Do not close your work until you SAVE.

Required Attachments and Supplemental Information

Any other MS4 program information for inclusion in the Annual Report may be attached on here. Use the Add Additional Attachments to add multiple documents.

Upload Required Attachments (15 MB per file limit) - <u>Help reduce file size and trouble shoot file uploads</u>
*Required Item

Note: To replace an existing file, use the 'Click here to attach file ' link or press the to delete an item.

Attach Documents		
File Attachment	SWMgmtResponsibilities.pdf	
⋓ File Attachment	Regional Education and Outreach.pdf	
File Attachment	pondinspections.pdf	

(To remove additional items, use your cursor to hover over the attachment section. When the drop down arrow appears, select remove item)

Draft and Share PDF Report with Municipality's Governing Body.

Press the button below to create a PDF. The PDF will be sent to the email address associated with the WAMS ID that is signed in. After the annual report has been approved by the governing body, you will have to come back to the MS4 eReporting system to submit the report to the DNR.

Draft and Share PDF Report with Municipality's Governing Body

Sign and Submit Your Application

Steps to Complete the signature process

- 1. Read and Accept the Terms and Conditions
- 2. Press the Submit and Send to the DNR button

NOTE: For security purposes all email correspondence will be sent to the address you used when registering your WAMS ID. This may be a different email than that provided in the application. For information on your WAMS account click <u>HERE</u>.

Terms and Conditions

Certification: I hereby certify that I am an authorized representative of the municipality covered under Menomonie, City MS4 Permit for which this annual report or other compliance document is being submitted, and that the information contained in this submittal and all attachments were gathered and prepared under my direction or supervision. Based on my inquiry of the person or persons under my direction or supervision involved in the preparation of this document, to the best of my knowledge, the information is true, accurate, and complete. I further certify that the municipality's governing body or delegated representatives have reviewed or been apprised of the contents of this annual report. I understand that Wisconsin law provides severe penalties for submitting false information.

ignee (must check current role prior to accepting terms and conditions)
 Authorized municipal contact using WAMS ID.
\supset Delegation of Signature Authority (Form $$ 3500-123) for agent signing on the behalf of the
uthorized municipal contact.
O Agent seeking to share this item with authorized municipal contact (authorized municipal
contact must get WAMS id and complete signature).
Authorized Signature.
I accept the above
terms and conditions.
and the second of the second o

After providing the final authorized signature, the system will send an email to the authorized party and any agents. This email will include a copy to the final read only version of this application.

City of Menomonie

Storm Water Management and Erosion Control Responsibilities

Erosion Control (Title 9, Chapter 10, Erosion and Sediment Control)

- Building Inspection Department
 - Ensure Compliance with Title 9, Chapter 10, Erosion and Sediment Control
 - Review and Approve Erosion Control Plans
 - Issue Erosion Control Permits for Residential and Commercial Construction in the City
 - Inspect all Construction Sites to ensure compliance with Erosion Control Plan
 - Issue corrective action notices or citations as necessary
 - o Issue Street Opening Permits with Erosion Control instructions
 - Copy of Street Opening Permit to the Street Department
- Street Department (and other utilities as applicable)
 - Obtain a Street Opening Permit (No Charge) from Building Inspection
 Department on all City initiated Street Openings
 - Ensure all public work sites are in compliance with Title 9, Chapter
 10, Erosion and Sediment Control
 - Inspect all approved Street Opening Permits for Erosion Control and Inlet Protection
 - Issue Inlet Protection Bags to contractors with approved Street
 Opening Permits
 - o Remove Inlet Protection Bags after final street repairs are complete

Director of Public Works

Date: 15 Dec 17

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Storm Water Management (Title 9, Chapter 10, Storm Water Management)

Building Inspection Department

- With assistance of City Engineer and Director of Public Works, determine if a Storm Water (SW) Management Plan is required
- O Log in and receipt all Storm Water Management Plans
 - Send to Engineering Dept. (Cedar Corp) for review
 - Retain electronic copy for records
- Maintain a file of approved private Storm Water Maintenance Plans
- Inspect private storm water BMPs once every 3-years or as deemed necessary by the Director of Public Works

Engineering

- Review and Approve all storm water management plans
 - Send copy of approval/disapproval to Building Inspection Dept.
- o Maintain file of all approved SW Management plans
- o Inspect SW BMPs during construction
 - Request Completion Certification Letter from design engineer
 - Send notice to Building Inspection Dept. when SW BMP is complete and accepted (include copy of completion certification letter from design engineer)
- Maintain a list/map of all private and public SW BMPs in the City
- Ensure City is in compliance w/ TMDL requirements for MS4 Permit
 - Develop Reach Shed map and charts showing Phosphorus reduction status for City MS4 Permit

• Street Dept.

- Conduct annual SW outlet and inlet inspection
 - Document results and corrective action
- Conduct Illicit Discharge Inspections every year
 - Document results and any possible discharges
- Maintain a list of public SW BMPs
- Annually inspect all public SW BMPs
 - Document inspections and corrective action
- Minimize salt usage during snow removal operations
- Ensure street sweeping program is IAW with DNR permit
 - O Yard waste pick-up program is conducted in Spring and Fall

	Rain to Rivers Educat	Rain to Rivers Educational Events and Activities	vities			
Event	Contact	Date	Time	Location	Who Was Involved	Description/Notes
Eau Claire River Implementation Team meeting	Dan Zerr	1/12/2017		Fall Creek	Dan Zerr. Kellv Jacobs	Monthly meeting of EC River Implementation Team, coordinating efforts to improve water quality throughout the EC River system
Eau Claire County Winter Garden						Did a 50 minute presentation on water, using it wisely in gardening, rain gardens, rain barrels, green infrastructure, etc. About 25
Seminar	Dan Zerr	1/28/2017	7.	Eau Claire	Dan Zerr	people present.
Red Cedar River Water Quality Partnership meeting	Dan Zerr	2/1/2017		Barron	Dan Zerr, Randy Eide, Lindsay Olson	Semi-monthly meeting of the RC Partnership, coordinating efforts to improve water quality throughout the RC River system
						Event took place at DeLong Middle School, sponsored by National Society of Professional Engineers, Discussed storm water
Math Counts Regional Competition	John Genskow	2/2/2017		Eau Claire	John Genskow	management practices between tests and awards
						Monthly meeting of EC River Implementation
Eau Claire River Implementation Team meeting	Dan Zerr	7102/6/2	17	Fall Creek	Dan Zerr, Greg Leonard	Team, coordinating efforts to improve water quality throughout the EC River system
	And a spiritual state of the st	***************************************				On-air interview about the Red Cedar River,
Interview on WEAU TV for the Red Cedar River Conference	Dan Zerr	2/22/2017	17	Eau Claire	Dan Zerr	the upcoming conference, and what people can do on their land to infiltrate water.
						Spoke with urban planning and development
		1,007.0	,	; ; ;		class at UW-RF on the basics of storm water in
Oldan Figuring Class at OW-NIVE Fails	Ci ystai Naleigii	2/ 20/ 20.	/1	אועבו רמווא	Ci ystal haleigii	ul bail developillelle.
,						Annual ned Cedar River Conference. Rain to Rivers had a booth, as did the City of
					Dan Zerr, Randy Elde,	Menomonie. Lots of education about
Red Cedar River Conference	Dan Zerr	3/9/2017	17	Menomonie	Landon Profaizer	infiltration.
						Nels Paulson, Chris Ferguson and Tina Lee from UW-Stout did a presentation at UW-Eau
				•		Claire about the Stout LAKES REU program.
						There was information about and discussion
						of the UWEC Water Street rain garden, and
						the rain garden recently planted at Lakeside
LAKES REU Presentation	Dan Zerr	3/15/2017	17	Eau Claire	Dan Zerr	Park in Menomonie.
						Presentation of Erosion Control and
						Stormwater Management - Just the Facts!
			***			raining on construction site erosion control
						and post-construction stormwater
				- :	3	ווומוומצפווווול, שונון ופצמות רס מטטוונמטוווול, טומון
Land & Water Conference Presentation David Nashold	David Nashold	3/16/2017	17	Elkhart Lake	David Nashold	review and permit compliance.
					of the state of th	Semi-monthly meeting of the KC Partnership,
	Dan Zerr	3/29/2017	17	Menomonie	Dan Zerr, Kandy Eide, Lindsav Olson	coordinating enorts to improve water quality throughout the RC River system
9		25 /25 /2				

					Designed specifically for MS4 personnel, this
					course to cuses on stolinwater permit
•					compliance as the key to restore and maintain
		•			the waters of the United States. Testing will be
					conducted. Students are expected to achieve a
					minimum overall score of 75% to be awarded
					1.2 CEUs (Continuing Education Units) from
To the contract of the contrac				Chad Christianson, David	Chad Christianson, David National Stormwater Center, and a five (5)
cormwater inspector -	מיייין לייילי ביילי	4/6/2017	Milwaukee	Gray	year CSI™ Inspector Certificate.
Municipal	Citad Cili istialisti	(TOT /0 /t			Monthly meeting of EC River Implementation
Tourse Tourse Tourse					Team, coordinating efforts to improve water
	Dan Zerr	4/13/2017	. Fall Creek	Dan Zerr, Greg Leonard	quality throughout the EC River system
ສີເຫລລາເ					3K and 4K students from St. Joseph's School
					came to city offices to learn about storm water
Storm Water Education for St. Joseph's					pollution, street sweepers, and what they can
School		4/18/2017	Menomonie	Randy Eide	do for water quality.
100100				•	Led approximately 20 city employees on a
				Crystal Raleigh, Mike	walk to pick up trash from 8 miles of city
71c/V/ 211 200/0 44/0 211-12 20110	Crystal Raleigh	4/21/2017	River Falls	Stifter	streets and trails.
אואפו רמווא כונא כובמון כלא אימוא	C: }2ca:aca				Supplied storm water education materials for
					local information packet. Eau Claire was one of
	. (40)				several locations statewide where members
			,		gathered for a weekend of meetings and
Wisconsin Young Professionals Week -		2100/107/	Earl Claire	John Genskow	activities
Eau claire Chamber of Commerce	Jonn Genskow	4, 24, 202	555		Participated in St. Croix Summit with
					discussions of urban storm water runoff along
	ANG			Crystal Raleigh, Mike	a one-mile walking tour of Lake George and
: :	40.00	7100/00/1	River Falls	Stifter	the Kinnickinnic River.
St. Croix River Summit	Crystal Kaleign	4/22/2011			Spoke to the congregation at UUC in Eau Claire
					about Farth Day, and touched on storm water
٠					and runoff issues. Handed out many coloring
Guest sermon at Unitarian Universalist		4,500,000,000	Hall Claire	Dan Zerr	books and rain garden manuals.
Church in Eau Claire	Dan Zeri	1,22/2021			Led a group of 12 high school juniors in storm
				Crystal Raleigh, Zach	drain stenciling project in River Falls. Stenciled
River Falls High School Service Learning	Solution Delains	4/25/2017	River Falls	Regnier	50 drains.
Day	Ciystal haleigil	7707 (C7 (A			A group of environmental studies students
			•		from UW-Eau Claire were given a tour of the
	A company				Lakeside Park rain garden. Storm water issues
					and the greater phosphorus issues in the Red
	7	7105/8C/V	Menomonie	Dan Zerr	Cedar River watershed were discussed.
Tour of Lakeside Park rain garden	חמוו לפון	1,202/02/1			Presented on the topic of storm water to
			-	Zach Regnier, Mike	Rocky Branch 3rd graders. Led students on a
ייפר סח לימנים יוליים	Crystal Raleigh	4/28/2017	River Falls	Stifter	walk to clean up four storm water ponds.
KOCKY Brailen ECO Day	Clystal narcign				Monthly meeting of EC River Implementation
Tour Touristion Touristion Tour			***		Team, coordinating efforts to improve water
Eau Claire River Implementation Leani		5/11/2017	Augusta	Dan Zerr, Greg Leonard	quality throughout the EC River system
meeting	Dan zerr	Imp In			1

			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		eau claire s stair Green Team planteu a tain garden on May 12. This new feature at Central
					Maintenance Facility will not only treat
					pollutants in rainwater runom berore neading 1
Rain Garden Planting	John Genskow	5/12/2017	Eau Claire	John Genskow	bare area along Forest Street.
					Presented on the topic of storm water and
Storm Water & Rain Garden					rain gardens to 140 students at the River Falls
Presentation	Zach Regnier	5/17/2017	River Falls	Zach Regnier	Montessori Elementary school.
i kahituwa marana m					Presented on Public Works & Engineering to
	~~~	,			approximately 400 second graders in the River
				A. 4	Falls School District. Presentations included
				•	topics on storm water and tours (touch a
				Crystal Raleigh, Zach	truck) of a street sweeper, snow plow, lawn
American Public Works Week	Crystal Raleigh	5/22/2017 - 5/26/2017	River Falls	Regnier, Mike Stifter	mower, and loader.
					The City Forestry Division has begun spring
					tree planting. They are planting 400 trees this
					season, over a six-week period (that's
					approximately 67 trees per week!). A variety
					of trees are being planted, including Kentucky
Tree Planting	John Genskow	6/1/2017	Eau Claire	John Genskow	Coffee, Linden, Elm, Gingko, and more.
					Monthly meeting of EC River Implementation
Eau Claire River Implementation Team				Dan Zerr, Greg Leonard,	Team, coordinating efforts to improve water
meeting	Dan Zerr	6/8/2017	Augusta	Liz Fagen	quality throughout the EC River system
			1		Semi-monthly meeting of the RC Partnership,
Red Cedar River Water Quality				Dan Zerr, Randy Eide,	coordinating efforts to improve water quality
Partnership meeting	Dan Zerr	6/14/2017	Barron	Lindsay Olson	throughout the RC River system
					Gave Urban Storm Water City Tour to
					approximately 35 participants, many of whom
				Crystal Raleigh, Zach	were from the dairy industry. For more
Water Tour - UW Discovery Farms	Crystal Raleigh	6/22/2017	River Falls	Regnier	details, see article here.
					Monthly meeting of EC River Implementation
Eau Claire River Implementation Team				Dan Zerr, Greg Leonard,	Team, coordinating efforts to improve water
meeting	Dan Zerr	7/12/2017	Augusta	Liz Fagen	quality throughout the EC River system
					Booth set up during the fair with information
					about storm water, rain barrels, projects in
Northern Wisconsin State Fair	John Genskow	7/12-7/15/17	Chippewa Falls	John Genskow	Chippewa Falls, etc.
And the second s					Many activities on the river and in classroom
					environments, including river paddles, clean-
		, A.			up work, "Just Add Water" education classes,
St. Croix River Fest	Chad Christianson	7/18-7/23/17	River Falls	Chad Christianson	and more.
			1		Presented to the WCWRPC Board of 21 County
					Commissioners about Rain to Rivers and
		11/2			provided some of the materials developed for
				-	R2R such as the informational brochure,
West Central Wisconsin Regional					member information sheet, and the high
Planning Commission Roard meeting	Landon Profaizer	7/13/2017	Eau Claire	Chris Straight	school curriculum.

				_	
					Presented updates and took confinents on Storm Water Ordinance Revisions, BMP's, and
City of Fau Claire Open House	John Genskow	7/20/2017	Eau Claire	John Genskow	rainfall
					Presented updates and took comments on
City of Eau Claire Plan Commission					Storm Water Ordinance Revisions, BMP's, and
Presentation	John Genskow	//31/201/	במת כומות		com: monthly monting of the DC Dortherchin
till and rotal Marchael Land				Dan Zerr, Randy Eide,	coordinating efforts to improve water quality
ned cedal nivel water guarry Darthership meeting	Dan Zerr	8/2/2017	Menomonie		throughout the RC River system
Simpon din nin ni					Poster presentations from students spending
					the summer at UW-Stout studying many
				•	aspects of water quality concerns in the
UW-Stout LAKES REU student		- AAA			region, including biology, economics,
presentation	Dan.Zerr	8/2/2017	Menomonie	Dan Zerr	sociology, and geology.
					WI Lakes Partnership chose to have a two-day
					meeting in Menomonie due to the issues with
					water quality in the region, and because of
			······································		local efforts to address these issues, including
		•			storm water retention and the newly installed
		,			rain garden at Lakeside Park on Lake
					Menomin. Talks from various presenters
•					included Dunn Co Land and Water
					Conservation, Tainter/Menomin Lake
•					Improvement Association, Polk Co Land and
	****				Water Resources, Pepin Co Land Conservation,
					and others. The event also featured a
	L. Rei			Dan Zerr, Lindsay Olson,	pontoon tour of blue green algae issues on
Wisconsin ( akes Partnership meeting	Dan Zerr	8/3-8/4/17	Menomonie	Dan Prestebak	Tainter Lake.
מוויים במצבי ביו ביו ביו ביו ביו ביו ביו ביו ביו ב					Presented updates and took comments on
					Storm Water Ordinance Revisions, BMP's, and
City of Fau Claire City Council Public	-		-		rainfall. City council adopted ordiance
Hearing	John Genskow	8/7/2017	Eau Claire	John Genskow	revisions on 8/8/17.
0					Monthly meeting of EC River Implementation
Eau Claire River Implementation Team				Dan Zerr, Greg Leonard,	Team, coordinating efforts to improve water
meeting	Dan Zerr	8/10/2017	Augusta	Liz Fagen, John Genskow	Liz Fagen, John Genskow   quality throughout the EC River system
Q					Monthly meeting of EC River Implementation
Fau Claire River Implementation Team					Team, coordinating efforts to improve water
meeting	Dan Zerr	9/14/2017	Augusta	Dan Zerr	quality throughout the EC River system
0.733			A CONTRACTOR OF THE CONTRACTOR		Presented on Urban Storm Water to 15 eighth
,					graders in the Leadership River Falls youth
					program. After we learned about storm
					water, we split into groups of three and
			w		stenciled "No Dumping-Drains To Stream"
Leadership River Falls Youth	Crystal Raleigh	9/15/2017	River Falls	Crystal Raleigh	messages on approximately 40 catch basins.

.

					A workshop with municipal road patrolmen, DNR staff, and county staff to discuss
					procedures for illicit discharge inspection. The
,					workshop is an update of similal sessions field in the past. The workshop accommodated
					both those municipalities that are preparing to
					conduct inspections as well as those that have
STORM WATER ILLICIT DISCHARGE	David Nashold	9/19/2017	Town of Lafayette	David Nashold	performed inspections and are interested in completing reporting.
				and the second s	Storm water information was available at this
	:	1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	Chad Christianson, Tom	event, along with the Rain to Rivers plinko
2017 Spirit of the St. Croix Art Festival	Cnad Christianson	9/23-9/24/1/	וומפחדו	Zeall	Consortion presentations to 5th graders
				David Nashold, Bill	Conservation presentations to our graders from Chippewa Falls school district including
Chippewa County Conservation Days	David Nashold	9/21/17 and 9/28/17	Chippewa Falls	McElroy	presentations on water quality.
					Semi-monthly meeting of the RC Partnership,
Red Cedar River Water Quality	Nap Zerr	10/4/2017	Barron	Kandy Elde, Lindsay Olson	coordinating end is to improve water quanty throughout the RC River system
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					Monthly meeting of EC River Implementation
Eau Claire River Implementation Team					Team, coordinating efforts to improve water
meeting	Dan Zerr _.	10/12/2017	Augusta	Dan Zerr	quality throughout the EC River system
					UW-Eau Claire Environmental Studies students
			al sa		participated in a field day at the Red Cedar
					Demonstration Farm discussing again under
UW-Eau Claire field trip to Ked Cedar	F	1,000,000	No concession	Osn Zerr Lindeav Olson	rinoff
Demonstration	רשון לבון	TO ISI (OT		1000	lectured UW-EC env policy class on water
Guest lecture to IIW-Eau Claire					quality issues, including storm water, ag
envionmental policy class	Dan Zerr	10/25/2017	Eau Claire	Dan Zerr	runoff, and applicable policy.
					Zerr was part of a presentation and panel
					discussion about water quality issues in the
					region, focusing on both runoff issues and
Water Issues Public Forum	Dan Zerr	11/1/2017	Eau Claire	Dan Zerr	groundwater quality.
				,	Booth set up during this conference, with
Celebrate the Chippewa River		1 20 00	( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	Landon Profaizer, Dan	information and educational materials
Conterence	Landon Protaizer	11/3/501/	בפח רופוו ב	1157	Monthly meeting of EC River Implementation
Eart Claire River Implementation Team				Dan Zerr, Greg Leonard,	Team, coordinating efforts to improve water
meeting	Dan Zerr	11/9/2017	Augusta	Liz Fagen	quality throughout the EC River system
0					Conducted a tour of the City's stormwater
					practices for a class of four students from UW-
UW-River Falls Class Tour	Zach Regnier	11/16/2017	River Falls	Zach Regnier	River Falls.
					Zerr was part of a presentation and panel
					discussion about water quality issues in the
					region, focusing on both runoff issues and
Water Issues Public Forum	Dan Zerr	11/27/2017	Menomonie	Dan Zerr	groundwater quality.
				i	Semi-montnly meeting of the KC Partnership,
Red Cedar River Water Quality	i.	1,000,010		Kandy Eide, Lindsay	coordinating enforts to improve water quality throughout the RC River system
Partnersnip meeting	Dan zeri	17/0/2011		The state of the s	

Dan Zerr, Greg Leonar 12/14/2017 Augusta Liz Fagen
1

## **DETENTION POND INSPECTION FORM**

LOCATION:		fier v few Drove	Rond
DATE:		svervsew Drive May 10 2017	•
	,		POND 1
<u> </u>	YES	LOCATION:	
		DATE FIRST NOTICED:	
		ACTION TAKEN:	
	NO		
Selence - 20	YES	LOCATION:	
		DATE FIRST NOTICED:	
		ACTION TAKEN:	
	NO		
VECETATION	YES	LOCATION:	·
		DATE FIRST NOTICED:	
	• • •	ACTION TAKEN:	
	NO		
RIPERNIP AND	YES	LOCATION;	
		ACTION TAKEN:	
	NO		
Saa)((3)0 (3)3:0(3)1:0()(:	YES	LOCATION:	Deepost section of pand near outlet
		DATE FIRST NOTICED:	
	. •	ACTION TAKEN:	CR Bryan long reach excavator  Removed sediment
	NO		
CONTROL	YES	LOCATION:	
লাখাত্যখন্ত ন		DATE FIRST NOTICED:	
	·	ACTION TAKEN:	

17th Street October 26, 2017 LOCATION: DATE: POND 1 EROSION AT 4 LOCATION: A DATE FIRST NOTICED: ACTION TAKEN: NO YES. LOCATION: SERIEING DATE FIRST NOTICED: ACTION TAKEN: NO VEGETATION SE LOCATION: DATE FIRST NOTICED: ACTION TAKEN: NO LOCATION: A DATE FIRST NOTICED: ACTION TAKEN: ΝO western most bay aesochion Sediment LOCATION: YES. Labor Day Weekend

CR Broyan hong Reach Excavator

Skimmed thin layer of silt off DATE FIRST NOTICED: ACTION TAKEN: NO ह्यमस्रिक्तसम्बद्धः द्वारागर©ा≖ LOCATION: ADATE FIRST NOTICED: ACTION TAKEN:

NO

**DETENTION POND INSPECTION FORM** 



## MEMO

engineers | architects | planners | environmental specialists |and surveyors | landscape architects | interior designers 604 Wilson Avenue Menomonie, WI 54751 715-235-9081 800-472-7372 FAX 715-235-2727 www.cedarcorp.com

DATE:

March 13, 2018

TO:

Randy Eide, City of Menomonie

FROM:

**Robert Jones** 

REGARDING:

TMDL Modeling Update.

Cedar Corporation has been assisting the City with updated Non-Point Source Phosphorus modeling compliant with the following documents:

1. Phosphorus Total Maximum Daily Loads (TMDL), Tainter Lake and Lake Menomin, approved by the EPA on September 14, 2012

2. Bureau Of Watershed Management Program Guidance, TMDL Guidance for MS4 Permits, released by the WDNR on October 28, 2014.

The primary goal of this modeling effort was to estimate the current total phosphorus generated and captured within the identified Lake Menomin TMDL areas. Together the TMDL and the WDNR guidance documents set a phosphorus reduction goal for the identified area of 46% compared to no controls. The City of Menomonie, TMDL area, is currently reducing 26% of the phosphorus in surface runoff through existing best management practices (BMPs)

Previous planning efforts identified 5,944 acres within TMDL area generating a modeled 1,245 pounds of phosphorus annually. Within this area, we identified 10 best management practices (BMP) which captured 242 pounds annually (19%). Private BMPs constructed under a City stormwater permit are estimated to capture an additional 81 pounds annually (7%). The TMDL area was broken into five sub-basins or "reachsheds" shown on the attached map. The individual reach results are presented below:

Reachshed	Acres	TP Loading (lbs)	Public BMP TP Captured (lbs)	Private BMP TP Captured (lbs)	Total % Reduction	TP Capture Goal (lbs)	% Reduction Goal
East	402	123	19	3	18%	56	46%
Hospital	1961	370	98	42	38%	170	46%
Industrial	1266	184	46	6	28%	85	46%
Island	24	14	0	0	0%	6	46%
North	2292	555	80	30	20%	256	46%
Grand Total	5944	1245	242	81	26%	573	46%

## WATER QUALITY ANALYSIS METHODOLOGY

Water quality model was completed using WinSLAMM (Source Loading and Management Model for Windows) created by PV & Associates, in association with the Wisconsin Department of Natural Resources (WDNR). This program is used to predict runoff volumes and non-point sources pollution loads based on land covers, land uses, soils, storm water treatment practices, and historical rainfall events. WinSLAMM has evolved over time. Various versions of the model have increased or decreased the effectiveness of various treatment practices.

WinSLAMM utilizes small storm hydrology in the calculation regime. The basis being that the majority of the runoff volume and pollutants in urban areas are from the small and medium rainfall events. WinSLAMM uses rainfall data files created by the United States Geological Survey (USGS). The pollutant analysis for the City of Menomonie uses the WisREG – Minneapolis MN 1959 Rainfall file.

WinSLAMM also uses other data files from the USGS for pollutant concentrations, pollution distributions, pollutant deliveries and pollutant particle size distributions for typical storm water runoff. The pollutant analysis is based on the standardized urban land uses within the City of Menomonie and various pervious and impervious areas within the land use. The data files are periodically revised; therefore, it is important to note which data files have been used in the analysis. It is also important to note the version of WinSLAMM used in the calculations. The following table, 3-1, lists the data files used in the analysis. WinSLAMM 10.3.2 was released on August 5, 2017.

## WinSLAMM 10.3.2 Standard File Data:

File Data Description	File
Rain File Pollutant Probability Distribution File Runoff Coefficient File Particulate Solids Concentration File Street Delivery File (Residential LU)	WisReg – Minneapolis MN 1959.ran WI_GEO03.ppdx WI_SL06 Dec06.rsvx v10.1 WI_AVG01.pscx WI_Res and Other Urban Dec06.std

## WATER QUALITY ANALYSIS TMDL

A permitted MS4 with an approved TMDL plan is required to contain an expression of the Waste Load Allocation (WLA) consistent with the assumptions in the TMDL. The Tainter Lake and Lake Menomin TMDL assumes a 20% TSS reduction as the baseline loading condition. Building on established methodologies, the preferred option for implementing TMDLs is percent reduction terminology similar to NR 151 therefore the conversion to the no-controls modeling condition is as follows:

TSS Percent Reduction (No Controls) = 20 + (0.80% * Control from baseline in TMDL)

Equation 5-1: 20% TSS Reduction Baseline Equation

TP Percent Reduction (No Controls) = 15 + (0.85% * Control from baseline in TMDL) Equation 5-2: 20% TP Reduction Baseline Equation

The percent reduction (no controls) requirements from the TMDL are adjusted per the above referenced equations. The required percent reductions for TP for each sub basin are summarized in the following table:

Basin	TP % Reduction from Baseline TMDL Report	TP % Reduction (no-controls)
Menomonie MS4	37%	46%

#### **Base Loading (No Controls)**

The No-Controls condition establishes an annual TP load generated by the City of Menomonie based on land uses and soils within the study area. The no-controls condition does not include removal of the pollutants by BMP. The no controls loads are used to determine the required TSS and TP load reduction. The following table summarizes the no control condition and the target load reduction for the City of Menomonie.

Reachshed	Acres	TP (lbs)	Reduction Goal	TP Captured Goal (lbs)
East	402	123	46%	56
Hospital	1961	370	46%	170
Industrial	1266	184	46%	85
Island	24	14	46%	. 6
North	2292	555	46%	256
Grand Total	5944	1245	46%	573

## **Existing Condition**

Ten existing BMPs were included in the analysis. These include nine city constructed vegetated swales and a wet detention pond with infiltration basin within the TMDL reachsheds. The location of each BMP is shown on the attached map.

The following tables summarize effectiveness of each of the modeled BMPs. A more detailed summary of the pollutant reduction per basin can be found in appendices of this report.

Public BMP ID	Acres Treated	TP Loading (lbs)	TP Captured (lbs)	% Reduction
1	270	24	22	92%
2	314	67	51	75%
3	33	11	7	61%
4	200	76	34	45%
5	61	35	5	13%
6	702	· 55	48	87%
7	187	15	11	76%
8	79	16	10	67%
9	625	47	35	75%
10	115	29	19	65%
Grand Total	2586	374	242	65%

Since 2008, the City has enforced a Stormwater Management Ordinance (Chapter 9-11). All new development and land disturbing activity is required to meet stormwater performance standards for: rate, infiltration, and TSS reduction and provide the City with a Maintenance Agreement requiring private upkeep and City compliance authority. This has resulted in private BMPs which the City has the authority to inspect and maintain. These private facilities have not yet been incorpated individually into this model. However, we present the following estimates based upon the acreage in each reachshed with a City stormwater permit.

Private BMPs by Reachshed	Stormwater Permitted Development (acres)	TP Loading (lbs)	Estimated Private BMP Captured (lbs)
East	22	6	3
Hospital	223	84	42
Industrial	94	12	6
Island	0	0	0
North	135	61	30
Grand Total	474	162	81

#### STORMWATER QUALITY PRACTICES

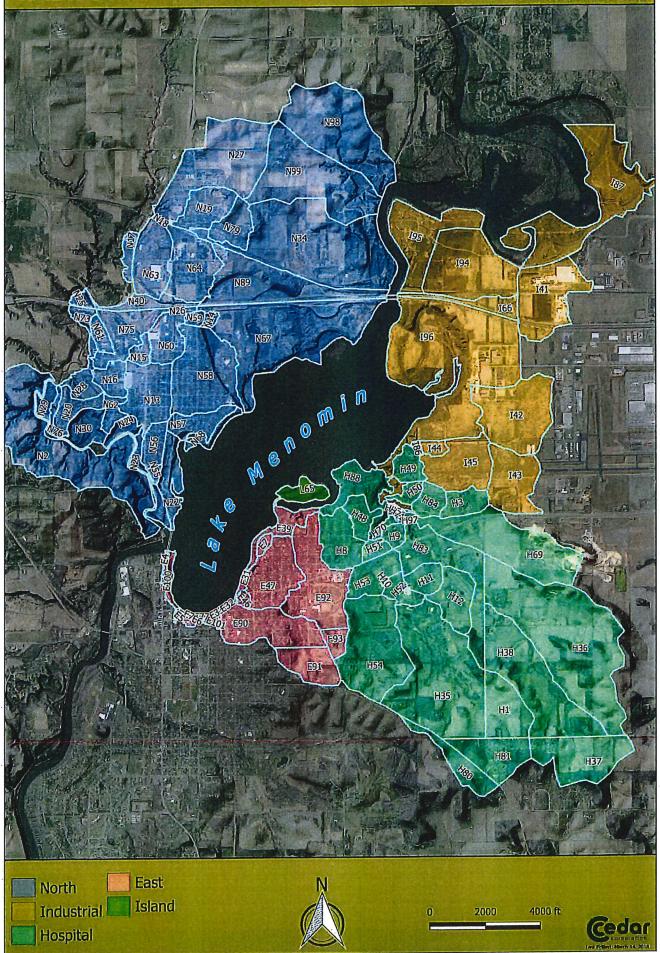
The current model shows that the selected BMPs alone to not reach the phosphorus reduction goals for the City TMDL. Below are some of the efforts that the City is continuing or considering completing which would affect the phosphorus treatment and modeled results in the future:

- 1. Maintain the City Stormwater Utility
- 2. Continue stream bank stabilization with projects like the 2015 Jarret Creek stabilization
- 3. Continue to remove legacy sediment phosphorus from water ways with projects like the planned 2018 Jarret Creek dredging project
- 4. Continue street cleaning and leaf pick-up practices
- 5. Complete the City modeling and GIS system:
  - a. verify the TMDL boundaries
  - b. revise sewer-shed areas to reflect recent revisions
  - c. gather data on private BMPs to incorporate into the model
  - d. review sites for additional, existing, vegetated swales and small BMPs
  - e. review for exempt areas such as: large undeveloped tracts of land, internally drained areas, highways not under City jurisdiction, riparian areas
  - f. incorporate street sweeping practices into modeled BMPs
  - g. update GIS parcels with stormwater permit approvals
- 6. Continue to implement the 2014 Amendment to the Urban Stormwater Plan recommendations, including the construction of regional stormwater BMPs like the 2017 Regional Pond #7 project:
  - a. 29th Ave NW Pond, 240 acre watershed, 31 lbs TP captured annually
  - b. 21st Ave NE Pond, 240 acre watershed, 70 lbs TP captured annually
  - c. Wakanda Park Pond, 150 acre watershed, 28 lbs TP captured annually
  - d. Junction Trail Pond, 70 acre watershed, 23 lbs TP captured annually
  - e. 2nd St W Pond, 150 acre watershed, 48 lbs TP captured annually
  - f. 9th St E Pond, 130 acre watershed, 33 lbs TP captured annually
  - g. 4th Ave E Pond, 870 acre watershed, 82 lbs TP captured annually

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			·

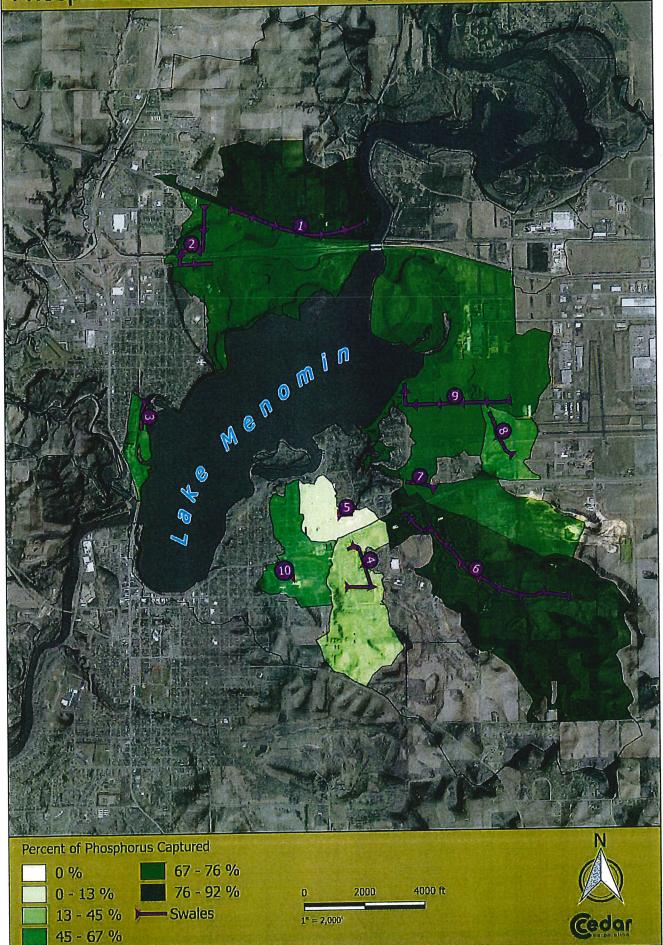
## City of Menomonie TMDL Sub-Watersheds





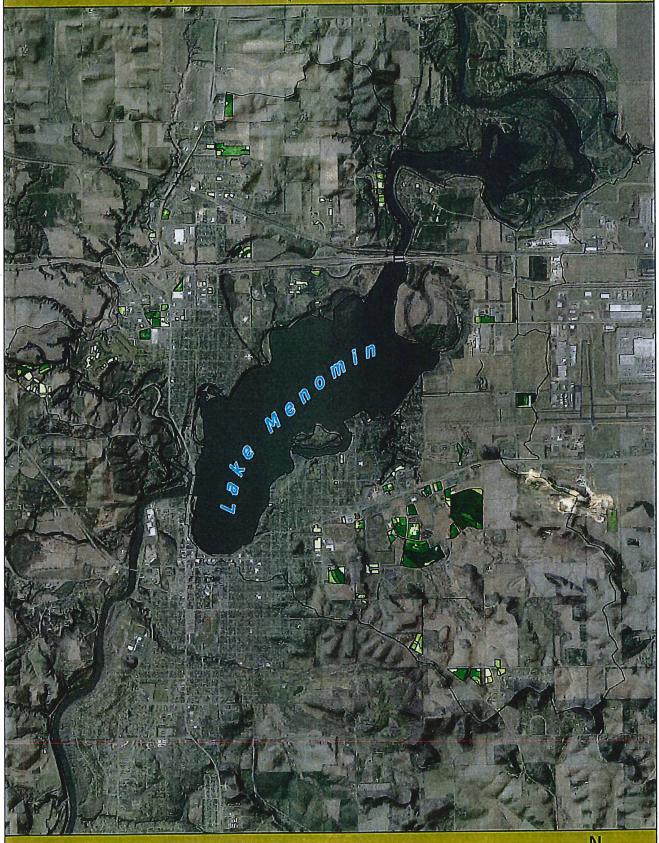
## Best Management Practice Total Phosphorus Removal Percentage





# Estimated Private Best Management Practice Phosphorus Capture (lbs)





Total Pounds of Captured Phosphorus

0.00 - 0.06 0.58 - 1.02

0.06 - 0.27 1.02 - 2.18

0.27 - 0.58

2.18 - 10.25

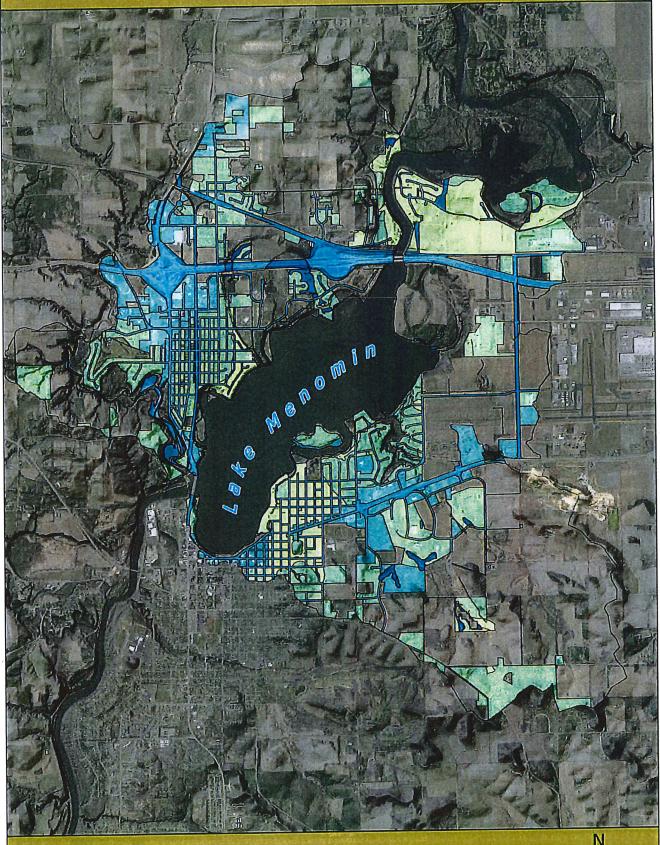
0 2000 4000 ft

1:28,000



# Total Phosphorus (TP) Loading (lbs/acre)





Pounds of Phosphorus

0.00 - 0.02 0.56 - 0.82

0.02 - 0.16 0.82 - 1.20

0.16 - 0.56 1.20 - 3.37

1:28,000

2000

4000 ft





1412 6th Street, Menomonie, WI 54751

## Memo

**To:** Lowell Prange, City Administrator.

From: Gary Barnett, Parks and Recreation Director

**Date:** March 14, 2018

Re: Replacement Vehicle for Parks and Recreation Department

Bids were received from three vendors for the budgeted purchase of a replacement vehicle for the Recreation Department. This vehicle will replace a 2004 van currently used by the department.

Vendor	Type of Vehicle	Comments	Final Bid Price
Northtown Ford - Menomonie	Ford 2018 Edge SE AWD	Met bid specifications	\$26,429.00
Keyes Chevrolet - Menomonie	Chevrolet 2018 Equinox LS	Bid alternate incl. 17" tires, 1.5L engine and delivery 7/15/18	\$22,900.00
Johnson Motors - Menomonie	GMC 2018 Terrain SLE	Met bid specifications	\$23,088.75

Based on the bids received, I would recommend that the bid be awarded to Johnson Motors for the GMC 2018 Terrain SLE. Copies of the bid specifications and actual bids are attached.

Phone: (715)232-1664 • Fax: (715)232-5328

Email: menorec@menomonie-wi.gov • www.menomonie-wi.gov



**BUSINESS NAME: Johnson Motors** 

1	TV	PF	OF	: VE	HI	CL	E:

**New Midsize Crossover SUV** 

2. SPECIFICATIONS STANDARDS FOR VEHICL	2.	SPECIFICA	ATIONS	<b>STANDARDS</b>	FOR VEHICLE
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**AWD** 

5 passenger

Year Range 2017-2018

Engine - Minimum 2.0L

Transmission: Automatic

Seat Type Cloth Front Bucket, Manual seat adjusters

Second Row Seats: 60/40 Fold Rear Seat

Cruise Control

Power Steering, door locks, power windows

Air Conditioning

Full Instrumentation w/ LCD Screen

Rear View Camera

AM/FM/CD/MP Radio

18" Wheels w/ aluminum rims

Paint Color - Grey or Blue

3	PR	ICI	NG	<b>FOR</b>	VEH	IICL	E:

Make	Model
Warranty ————	
Unit Price \$	
Less Trade In 2004 Ford Freestar Van: _	
Delivery: \$	Expected Delivery Date:
TOTAL: \$	_